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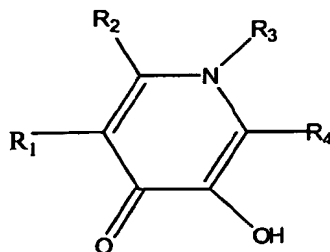
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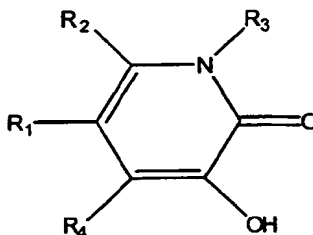
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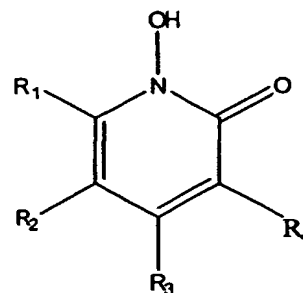
(54) Title: INHIBITOR DEVELOPMENT FOR 4-HYDROXYPHENYLPYRUVATE DIOXYGENASE, EMPLOYING TYROSINEMIA I AS A MODEL FOR HUMAN DISEASES MEDIATED BY 2-OXOACID UTILIZING DIOXYGENASES



I



II



III

(57) Abstract: The present invention is directed to a method of inhibiting 4-hydroxyphenylpyruvate dioxygenase in a living system by administering to the living system an effective amount of a compound of formulas I or II or III or derivatives thereof as follows: R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, and R<sup>4</sup> each individually represent a hydrogen, an alkyl, alkenyl, or alkoxy group containing 1 to about 8 carbon atoms, an aryl, aralkyl, or cycloalkyl group containing about 5 to 12 carbon atoms, or a carboalkoxy or carbamyl group containing up to 8 carbon atoms, or a peptide or peptidomimetic moiety containing 10 to about 30 carbon atoms under conditions effective to inhibit 4-hydroxyphenylpyruvate dioxygenase in the living system. These compounds are also useful in carrying out a method of treating a patient and a method of regulating plant growth.